

AMENDMENTS

This listing of claims will replace all prior versions, and listings, of claims in the application:

In the claims

1. (currently amended) A crosspoint switch architecture having:
 - a monolithic substrate;
 - a plurality (N) of electrical inputs provided on said substrate;
 - a plurality (M) of electrical outputs provided on said substrate;
 - switch means disposed on said substrate for selectively interconnecting said inputs to said outputs, said switch means having M multiplexers and a plurality (N) switchable amplifiers, each of said switchable amplifier operatively coupled to a corresponding one of said N inputs; and
 - means disposed on said substrate for controlling said switch means,
 - wherein each multiplexer is an N to 1 multiplexer and each multiplexer is adapted to receive each of said N electrical inputs,
 - wherein each of said N inputs to each of said multiplexer is received through a respective one of said N switchable amplifiers, and
 - wherein one of the N inputs can be selected for outputting to one of the M outputs by switching on the corresponding switchable amplifiers and disabling the rest of the switchable amplifiers.
- 2-3. (canceled)

4. (currently amended) The invention of Claim 1, wherein the switch means further comprise a plurality (N) of isolation buffers, each of said isolation buffers operatively coupled to the output of a corresponding one of switchable amplifiers ~~Claim 3 wherein each of said N inputs to each of said multiplexers is received through a respective one of N switchable amplifiers.~~

5. (currently amended) A crosspoint switch architecture having:
a monolithic substrate;
a plurality (N) of electrical inputs provided on said substrate;
a plurality (M) of electrical outputs provided on said substrate;
switch means disposed on said substrate for selectively interconnecting said inputs to said
outputs, said switch means having M multiplexers; and
means disposed on said substrate for controlling said switch means.
~~The invention of Claim 1~~ wherein each multiplexer includes N selection multiplexers.

6. (Original) The invention of Claim 5 further including means for summing the outputs of said N selection multiplexers to provide a single output.

7. (Original) The invention of Claim 6 further including means for buffering said single output.

8. (canceled)

9. (currently amended) A crosspoint switch architecture having:
a monolithic substrate;
a plurality (N) of electrical inputs provided on said substrate;
a plurality (M) of electrical outputs provided on said substrate;
switch means disposed on said substrate for selectively interconnecting said inputs to said
outputs, said switch means having M multiplexers;
means disposed on said substrate for controlling said switch means; and
~~The invention of Claim 8 further including~~ means for summing the outputs of said N buffers
to provide a single output,
wherein each of said N inputs to each of said multiplexers is received through a respective
one of N switchable isolation buffers.

10. (Original) The invention of Claim 9 further including means for buffering said
single output.

11. (Original) The invention of Claim 1 wherein said control means includes a serial
in, parallel out shift register.

12-14. (canceled)

15. (currently amended) A crosspoint switch architecture having:

a monolithic substrate;

a plurality (N) of electrical inputs provided on said substrate;

a plurality (M) of electrical outputs provided on said substrate;

M multiplexers disposed on said substrate for selectively interconnecting said inputs to said outputs, each of said multiplexers being an N to 1 multiplexer, whereby each multiplexer is adapted to receive each of said electrical inputs;

a serial in, parallel out shift register disposed on said substrate for controlling said multiplexers; and

~~The invention of Claim 14 further including~~ means for summing the outputs of said N buffers to provide a single output.

16. (Original) The invention of Claim 15 further including means for buffering said single output.

17-18. (canceled)

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